



**DART**  
AEROSPACE

Print

## Purchasing Receipts

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit
P0039877	ACI001-VC	1	1	Net 30	M4140H-R2.750	4140 Round Bar 2.750 : AISI 4140H ROUND BAR PER AISI4140OR ASTM A304-02/-A-434-BC/- A193-03-GRADE B7/-A29- 03/-A322-91 OR UNS#- G41400 MINIMUM ULTIMATE TENSILE STRENGTH=100 KSI MINIMUM YIELD TENSILE STRENGTH=66KSI receive ft				12	5/18/2018	11		S072715	Stock	5/19/2018	\$ 36.74 / ft
		2			M6061T6B0.750X05.000	6061T6 Bar 0.750 X 5.000 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ- A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft						12		S072716	Stock	5/19/2018	\$ 15.41 / ft
		3			M6061T6B0.500X04.500	6061T6 Bar 0.500 X 4.500 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ- A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft						12		S072717	Stock	5/19/2018	\$ 12.16 / ft
		4			M6061T6B0.750X01.500	6061-T6 Bar .750 X 1.50 : : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ- A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft				40		40		S072718	Stock	5/19/2018	\$ 4.74 / ft
		5			M6061T6B1.500X02.500	6061-T6 Bar 1.50 X 2.50 : : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ- A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft				24		24		S072719	Stock	5/19/2018	\$ 15.46 / ft
		6			M6061T6B2.250X2.250	6061T6 Bar 2.250 X 2.250 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ- A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft				12		12		S072720	Stock	5/19/2018	\$ 45.92 / ft
		7			M6061T6S.188	6061-T6 .188 Sheet : : MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive sf				32		32		S072721	Stock	5/19/2018	\$ 12.11 / sf
		8			M6061T6S.080	6061-T6 .080 Sheet : : MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive sf				192		192		S072722	Stock	5/19/2018	\$ 5.66 / sf



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# **PURCHASE ORDER** **PO039877**

**Supplier:** ACI001-VC  
Acier Ouellette Inc.  
935 Boul. Du Havre  
Valleyfield  
QC  
J6S 5L1 Canada  
Phone: 800 667 4248  
Fax: 450 377 5696

**PO No:** PO039877

**PO Date:** 5/11/18

**Due Date:** 5/18/18

**Purchase Order**

**Revision:**

**Revision Date:**

**Ship-To Contact:** Lavoie, Chantal  
clavoie@dartaero.com

**E-MAILED**  
MAY 11 2018

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**Via:** Ground

**Pynt Terms:** Net 30

**Freight Terms:**

**Special Comments:** quotation sou0105054

## **Items**

Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	M4140H-R2.750		4140 Round Bar 2.750 : AISI 4140H ROUND BAR PER AISI4140OR ASTM A304-02/-A-434- BC/-A193-03-GRADE B7/- A29-03/-A322-91 OR UNS#-G41400 MINIMUM ULTIMATE TENSILE STRENGTH=100 KSI MINIMUM YIELD TENSILE STRENGTH=66KSI receive ft	Firmed	5/18/18	12 ft	0 ft	12 ft	\$36.744166/ft	\$440.93
2	M6061T6B0.750X05.000		6061T6 Bar 0.750 X 5.000 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ- A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	5/18/18	12 ft	0 ft	12 ft	\$15.41/ft	\$184.92
3	M6061T6B0.500X04.500		6061T6 Bar 0.500 X 4.500 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ- A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	5/18/18	12 ft	0 ft	12 ft	\$12.15666/ft	\$145.88

## PURCHASE ORDER

Items										
Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
4	M6061T6B0.750X01.500		6061-T6 Bar .750 X 1.50 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	5/18/18	40 ft	0 ft	40 ft	\$4.738/ft	\$189.52
							40'		MAY 19 2018 DAS 11 9-89	
5	M6061T6B1.500X02.500		6061-T6 Bar 1.50 X 2.50 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	5/18/18	24 ft	0 ft	24 ft	\$15.462916/ft	\$371.11
							24'		MAY 19 2018 DAS 11 9-89	
6	M6061T6B2.250X2.250		6061T6 Bar 2.250 X 2.250 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	5/18/18	12 ft	0 ft	12 ft	\$45.91666/ft	\$551.00
							12'		MAY 19 2018 DAS 11 9-89	
7	M6061T6S.188		6061-T6 .188 Sheet : MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive sf	Firmed	5/18/18	32 sf	0 sf	32 sf	\$12.108125/sf	\$387.46
							32 <sup>1/2</sup>		MAY 19 2018 DAS 11 9-89	
8	M6061T6S.080		6061-T6 .080 Sheet : MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive sf	Firmed	5/18/18	192 sf	0 sf	192 sf	\$5.658802/sf	\$1,086.49
							192 <sup>1/2</sup>		MAY 19 2018 DAS 11 9-89	
9	M17-4-R0.750		17-4 Round Bar .750 : 17-4 PH / S17400 / TYPE 630 SS ROUND BAR PER AMS 5643/ ASTM A564 GRAIN MUST BE ALONG LENGTH OF BAR MINIMUM YIELD TENSILE STRENGTH = 100 KSI MINIMUM ULTIMATE TENSILE STRENGTH = 150 KSI receive ft	Firmed	5/18/18	24 ft	0 ft	24 ft	\$8.6508333/ft	\$207.62
							24'		MAY 19 2018 DAS 11 9-89	

Items										
Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
10	M303B1.000X1.000		M303B1.000 X 1.000 : MATERIAL: AISI 303 SS BAR AS PER ASTM A582 NOTE: AISI 304/316 NOT ACCEPTABLE receive ft	Firmed	5/23/18	24 ft	0 ft	24 ft	\$24.5125/ft	\$588.30
11	M303R1.000		303 Round Bar 1.00 : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE:304/316 NOT ACCEPTABLE receive ft	Firmed	5/18/18	12 ft	0 ft	12 ft	\$8.4358333/ft	\$101.23
12	MT-4140-S-1.250X2.000		AISI 4140 Steel Bar : MATERIAL : AISI 4140 / 4142 STEEL SHEET OR PLATE MINIMUM ROCKWELL C = 28 Rc MAXIMUM ROCKWELL C = 32 Rc ASTM A829, AMS 6395	Firmed	5/18/18	6 ft	0 ft	6 ft	\$36.16/ft	\$216.96
Grand Total:										\$4,471.42

## Order Notes

## Procurement Quality Clauses

A005 right of entry  
A012 chemical and physical test report  
A016 personnel qualification  
A017 raw material identification (as applicable)  
A026 certification of material conformance  
A041 quality management system  
A042 dart notification by supplier  
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

Plex 5/11/18 11:39 AM dart.lavoie.chantal



**ACIER OUELLETTE INC.**

935, Boul. du Hâve  
Salaberry de Valleyfield (Québec) J6S 5L1  
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248  
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

**DELIVERY - CLIENT**

CO00089113

**Billed to**

DART AEROSPACE LTD  
1270, ABERDEEN ST.  
HAWKESBURY, Ontario, K6A 1K7

**Shipped to**

, Ontario,

Instruction F-M

Att : CHANTAL LAVOIE Tél.: 613-632-5200  
Delivery Route 5

Page 1

Credit Terme

Net 30 Days

Carrier

OUELLETTE VALLEYFIELD

Processed by

Josianne Bourdon

Delivery date

2018/05/18

Your order N°

39877

Customer N°

CL10001056

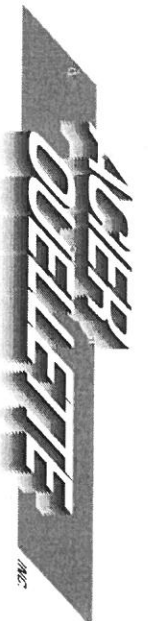
Date

2018/05/11

Product Description	Weight	Qty	U/M	PCS NB			Internal Use Only				
				CMD	EXP	B/O	IN	I	S	C	OUT
1 ROUND 4140 HEAT TREAT 2 3/4 (R) R4140-234H 4931 <i>1 X 12' LINE 1 Heat : L7356 COUPE A LA SCIE SCIE</i>	253.56	12.00	PL_\$CLB				11'				DAS 11 9-89 MAY 19 2018
2 FLAT ALU 3/4 X 5 6061-T6 * FAL-345 2598 <i>1 X 12' DC LINE 2 Heat : 16030232B</i>	52.69	12.00	PL_\$CLB				12'				DAS 11 9-89 MAY 19 2018
3 FLAT ALU 1/2 X 4 1/2 6061-T6 NS FAL-12412 10194 <i>1 X 12' LINE 3</i>	31.72	12.00	PL_\$CLB				12'				DAS 11 9-89 MAY 19 2018

NIR : R-109516-6

Next Page...



## DELIVERY - CLIENT

CO00089113

### ACIER OUELLETTE INC.

935, Boul. du Hâve  
Salaberry de Valleyfield (Québec) J6S 5L1  
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248  
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

#### Customer N°

CL10001056

#### Date

2018/05/11

#### Delivery date

2018/05/18

#### Your order N°

39877

#### Processed by

Josianne Bourdon

#### Salesman

#### Carrier

OUELLETTE VALLEYFIELD

#### Credit Terme

Net 30 Days

#### Shipped to

, Ontario,

**Billed to**  
DART AEROSPACE LTD

1270, ABERDEEN ST.  
HAWKESBURY, Ontario, K6A 1K7

**Instruction** F-M

Att : CHANTAL LAVOIE Tél.: 613-632-5200

**Delivery Route** 5

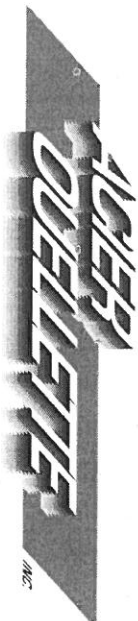
#### Page

2

Product Description	Weight	Qty	U/M	PCS NB			Internal Use Only				
				CMD	EXP	B/O	IN	I	S	C	OUT
AC16272-TH-16/05 Heat : 021171116B / 021171117B 4 FLAT ALU 3/4 X 1 1/2 6061-T6 * FAL-34112 2584	54.00	40.00	PL \$CLB		2x12'		40'				MAY 19 2018 DAS 11 9-89
2 X 20' LINE 4 Heat : 68549 5 FLAT ALU 1 1/2 X 2 1/2 6061-T6 * FAL-112212 2439	105.74	24.00	PL \$CLB		2x12'		24'				MAY 19 2018 DAS 11 9-89
2 X 12' LINE 5 Heat : 386350 6 SQUARE ALU 2 1/4 6061-T6 NS CAL-214 10543	71.36	12.00	PL \$CLB		1x12'		12'				MAY 19 2018 DAS 11 9-89
1 X 12' LINE 6 AC16272-TH-16/05											

NIR : R-109516-6

Next Page...

**ACIER OUELLETTE INC.**

935, Boul. du Hâvre  
Salaberry de Valleyfield (Québec) J6S 5L1  
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248  
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

**DELIVERY - CLIENT**

CO00089113

**Billed to**

DART AEROSPACE LTD  
1270, ABERDEEN ST.  
HAWKESBURY, Ontario, K6A 1K7

**Shipped to**

, Ontario,

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Instruction F-M

Delivery Route 5

Page

3

Customer N°

CL10001056

Date

2018/05/11

Delivery date

2018/05/18

Your order N°

39877

Processed by

Josianne Bourdon

Salesman

Carrier

OUELLETTE VALLEYFIELD

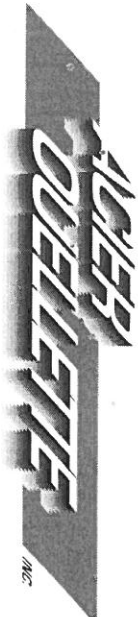
Credit Terme

Net 30 Days

Product Description	Weight	Qty	U/M	PCS NB			Internal Use Only				
				CMD	EXP	B/O	IN	I	S	C	OUT
Heat : 200729020 7 ALU SHEET 3/16 6061-T6 (4 X 8) FEAL-316486061 4271	85.92	32.00	P12_\$CLB		14		① 32 P12				DAS MAY 19 2018 9-89
1 X 4' X 8' LINE 7 Heat : 6161503					4x8						
8 ALU SHEET .081 (12G) 6061-T6 (4 X 12) FEAL-0814126061 3195	219.07	192.00	P12_\$CLB		4x		192 P12				DAS MAY 19 2018 9-89
4 X 4' X 12' LINE 8 Heat : 01/0083429/7 X 4 TRANSIT-ST-JEROME LE 14/05					4x12						

NIR : R-109516-6

Next Page...

**ACIER OUELLETTE INC.**

935, Boul. du Hâvre  
Salaberry de Valleyfield (Québec) J6S 5L1  
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248  
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

**DELIVERY - CLIENT**

CO00089113

**Billed to**

DART AEROSPACE LTD  
1270, ABERDEEN ST.  
HAWKESBURY, Ontario, K6A 1K7

**Shipped to**

, Ontario,

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Instruction F-M

Delivery Route 5

Page 4

Customer N°

CL10001056

Date

2018/05/11

Delivery date

**2018/05/18**

Your order N°

39877

Processed by

Josianne Bourdon

Salesman

Carrier

OUELLETTE VALLEYFIELD

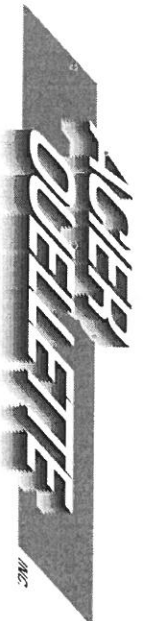
Credit Terme

Net 30 Days

Product Description	Weight	Qty	U/M	PCS NB			Internal Use Only				
				CMD	EXP	B/O	IN	I	S	C	OUT
<b>10</b> PALETTE PALETTE <b>7573</b>		1.00	UN_\$UN								
<b>11</b> ROUND SS 3/4 17-4PH NS RSS-34174 <b>9268</b> <i>2 X 12' R/L LINE 9</i> <i>Heat : 9SG0264-G5011</i>	36.05	24.00	PL_\$CLB				<i>24'</i>				<i>DAS</i> <i>MAY 19 2018</i> <i>9-89</i>
<b>12</b> SQUARE SS 1 SS303 NS CSS-1303 <b>9512</b> <i>2 X 12' R/L LINE 10</i> <i>AC16273-SM-17/05</i> <i>b/b</i>	81.60	24.00	PL_\$CLB								
<b>13</b> ROUND SS 1 303 (R) RSS-1303 <b>8519</b> <i>1 X 12' R/L LINE 11</i>	32.04	12.00	PL_\$CLB				<i>12'</i>				<i>DAS</i> <i>MAY 19 2018</i> <i>9-89</i>

NIR : R-109516-6

Next Page...



## DELIVERY - CLIENT

CO00089113

### ACIER OUELLETTE INC.

935, Boul. du Hâvre  
Salaberry de Valleyfield (Québec) J6S 5L1  
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248  
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

#### Customer N°

CL10001056

#### Date

2018/05/11

#### Delivery date

2018/05/18

#### Your order N°

39877

#### Processed by

Josianne Bourdon

#### Salesman

#### Carrier

OUELLETTE VALLEYFIELD

#### Credit Terme

Net 30 Days

#### Billed to

DART AEROSPACE LTD  
1270, ABERDEEN ST.  
HAWKESBURY, Ontario, K6A 1K7

, Ontario,

Att : CHANTAL LAVOIE Tél.: 613-632-5200

#### Instruction F-M

Delivery Route 5

#### Page

5

Product Description	Weight	Qty	U/M	PCS NB			Internal Use Only			
				CMD	EXP	B/O	IN	I	S	C
Heat : 620M  14 PLATE 4140 HEAT TREAT 1 1/4 NS P4140-114H 8506  1 X 2" X 72" LINE 12 AC16274-FU-17/05  B/D	51.05	1.00	P12_\$CLB							

Total Weight (Lbs) : 1 074.80

NIR : R-109516-6

Total Weight (Lbs) : 1 074.80

NIR : R-109516-6

**Conditions :**  
All sold and delivered materials remain the property of "Acier Ouellette Inc" until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Prepared By :	Verified By :	Delivered By :	Time

Customer's Signature

Date

18<sup>Y</sup>  
05<sup>M</sup>  
18<sup>D</sup>

Total (\$CAD)

# CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

4931

R-4140-2344

50901

15955

2p

Page 01 of 02

Certification Date  
7-MAY-2018

CUSTOMER ORDER NUMBER  
NUMÉRO DE COMMANDE DU CLIENT

AC00015955

Invoice Number  
S706881

PART NUMBER/NUMÉRO DE PIÈCE

506439

SOLD TO: ACIER OUELLETTE INC. SHIP TO: ACIER OUELLETTE INC.  
VENDU À: DIVISION SALABERRY DE VALLEYFIELD DIVISION SALABERRY DE VALLEYFIELD  
935, BOUL. DU HAVRE 935, BOUL. DU HAVRE  
SALABERRY-DE- VALLEYFIELD QC J6S 5L1 SALABERRY-DE- VALLEYFIE QC J6S

Description: 4140/4142 HR HT BAR STRESS FREE 269/321 BHN

2-3/4 RD X 20" R/L

Line Total: 485 LB

HEAT: L7356

ITEM: 506439

Specifications:

ASTM A193 GR B7 16

ASTM A434 GR BC 15

ASME SA193 GR B7 15

ASTM A29 15

ASTM A962 16A

ASTM E381 12

EN 10204 3.1 04

## CHEMICAL ANALYSIS

C	MN	P	S	SI	CR	NI	MO
0.41	0.97	0.0090	0.016	0.26	0.98	0.14	0.20
CU	AL	V					
0.22	0.026	0.007					

RCPT: R362671

COUNTRY OF ORIGIN : USA

## MECHANICAL PROPERTIES

	YLD STR	ULT TEN	%ELONG	%RED	HARDNESS
DESCRIPTION	PSI	PSI	IN 02 IN	IN AREA	BHN
	120902.0	138322.0	18.0	56.7	299

GRAIN SIZE : 8 -

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du fabricant après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport n'a pas été en contact avec le mercure pendant sa possession.

JOANNE DESPRES

MANAGER QUALITY ASSURANCE  
GÉRANT DE L'ASSURANCE QUALITÉ



# CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 02 of 02

Certification Date  
7-MAY-2018

CUSTOMER ORDER NUMBER  
NUMÉRO DE COMMANDE DU CLIENT

AC00015955

Invoice Number  
S706881

PART NUMBER/NUMÉRO DE PIÈCE  
506439

SOLD TO:	ACIER OUELLETTE INC.	SHIP TO:	ACIER OUELLETTE INC.
VENDU À:	DIVISION SALABERRY DE VALLEYFIELD	EXPÉDIÉ À:	DIVISION SALABERRY DE VALLEYFIELD
	935, BOUL. DU HAVRE		935, BOUL. DU HAVRE
	SALABERRY-DE- VALLEYFIELD QC J6S 5L1		SALABERRY-DE- VALLEYFIE QC J6S

Description: 4140/4142 HR HT BAR STRESS FREE 269/321 BHN  
2-3/4 RD X 20' R/L

HEAT: L7356

ITEM: 506439

Line Total: 485 LB

STRAND CAST REDUCTION RATIO 72.7 TO 1  
MATERIAL IS FREE FROM MERCURY CONTAMINATION  
NO WELD REPAIR PERFORMED ON MATERIAL  
THERMAL TREATMENT: OK  
AUSTENITIZED 1625F .1 HRS  
WATER QUENCHED  
TEMPERED 1300F .2 HRS  
MACRO: OK

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du fabricant après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JOANNE DESPRES  


MANAGER QUALITY ASSURANCE  
GÉRANT DE L'ASSURANCE QUALITÉ

# MILL TEST

FA 345

BILL TO	CERT CODE: 1	DIE NUMBER S 23758	DATE OF SHIPMENT Oct/13/2016	MANIFEST NO. 197683 - 3 358425
SHIP TO	CUSTOMER PO 100664	ALLOY 6061	TEMPER T6	SALESMAN HOUSE ACCOUNTS
ACIER OUELLETTE	CUSTOMER PART NUMBER DT23758	PART DESCRIPTION	MADE IN CANADA	
SODSCRIPTION	FLAT BAR 5" X 3/4" SC	CERTIFICATION MILL TEST ASTM B221-14		

## Mechanical Properties

Lot	Alloy	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation	Hardness Rockwell F	Conductivity
A.11	6061	Oct/06/2016	41.30	38.20	11.10	85.9,86.1,86.3	

## Chemical Composition

Cast Number	Lot	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	II	Ga	V	B	Zr	Bi	Pb	Sn	Sr	Co	Al	Other
16030232B	A.11	6061	0.53	0.18	0.22	0.03	0.8	0.08	0	0.01	0.01	0	0	0	0	0	0	0	0	0	0	0

We certify that the following extrusions have been quality inspected/tested and conforms to required dimensional and temper specifications.



David Natale  
Quality Control Manager

89113

Dart

16272N



Can Do.

# Service Center Metals

5850 Quality Way  
Prince George, VA 23875

## CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS



OUR ORDER NUMBER	ITEM
938725	1

BILL TO

SHIP TO

MANIFEST NUMBER

CUSTOMER PO

CUSTOMER PART NUMBER

DIE NUMBER

ALLOY/TEMPER

DESCRIPTION

DATE OF SHIPMENT

SALESPERSON

CERTIFICATION

SPECIFICATION

Quantity Certified 1,016 lbs 32 pcs

354624  
5400379606  
ALREC00548

RB0456  
6061-T6511  
SCRB .500 x 4.500

1/10/2018  
D. Schroeder (Canada)

ASTM-B221-14 StencilCont  
AMS-QQA-200/8 Rev-A  
RoHS 2011/65/EU Compliant

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. Items produced and certified as 6061-T6511 also meet the requirements of 6061-T6.

If aluminum products supplied by Service Center Metals, LLC contain no functional mercury. Neither mercury nor its compounds are used in the manufacture of aluminum products at our facility. Furthermore, aluminum products supplied by Service Center Metals have not, to the best of our knowledge, contacted any source of mercury.

CM is ISO 9001-2015 certified

This product is RoHS-2, REACH, and DfARS compliant.

### Mechanical Properties

Tests	Lot No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
2	201721131	1/7/18	min 41.20 max 41.30	min 36.20 max 36.90	min 23.30 max 24.40

### Chemical Composition for Aluminum Alloy 6061

Cast #	Lot No.	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al	Each	Others Total	Melt Source:
02J171116B	201721131	6061	0.62	0.25	0.19	0.07	0.86	0.07	0.03	0.02	97.88	0.05	0.15	United States of America
02J171117B	201721131	6061	0.62	0.27	0.20	0.06	0.86	0.07	0.04	0.03	97.86	0.05	0.15	United States of America

CM products are melted and extruded in the USA

Calvin J. Wiggins, Director of Quality & Technical Services

Print Date: 1/10/2018

#2584

HAL-34112-V

100-2104  
49670**Test de dureté Rockwell  
Rockwell Hardness Test**Client / Customer : **LES ACIERS TRANSBEC (1997) LTEE.**Adresse / Address : **4054 BOUL. LE CORBUSIER # 201  
LAVAL, QC  
H7L5R2**# commande **7011453**# bon de commande / Purchase order # : **OU-47404**# de matrice / Die # : **MS 16477**Description : **1 1/2" X 3/4" FLAT BAR**Alliage & trempage / Alloy & temper : **6061 T6** Longueur / Length : **6097 mm**# Contrôle / Control # : **84119-2**# Coulée / Cast # : **68549**Dureté Rockwell E /  
Rockwell E hardness : **94 HRE**Min. requis /  
Min. required : **88 HRE**Max. permis /  
Max. permitted : **100 HRE**

Composition chimique typique / Typical chemical composition :

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
6063	0,28 - 0,60	0,13 - 0,25	0,10 Max	0,10 Max	0,35 - 0,73	0,10 Max	0,05 Max	0,05 Max
6005	0,68 - 0,72	0,15 - 0,27	0,04 - 0,08	0,06 - 0,08	0,48 - 0,52	0,03 Max	0,05 Max	0,03 Max
6005A	0,65 - 0,75	0,15 - 0,27	0,15 Max	0,20 - 0,30	0,45 - 0,55	0,10 Max	0,05 Max	0,05 Max
6061	0,50 - 0,76	0,13 - 0,29	0,15 - 0,28	0,10 Max	0,80 - 1,00	0,04 - 0,14	0,08 Max	0,05 Max
6351	0,7 - 1,3	0,5 Max	0,10 Max	0,40 - 0,80	0,40 - 0,80	---	0,50 Max	0,20 Max

Nous certifions que le matériel fourni rencontre les exigences chimiques telles qu'annoncées par la norme **ASTM B-221-14** excepté pour la section 8.2 (nombre de spécimen) .

We hereby certify that the material supplied meets the chemical properties as published by the ASTM B-221-14 except for section 8.2 (number of specimen) .

Sincèrement vôtre,  
Yours truly,

date : **2017-03-10**

Daniel Alfredo Pelletier  
Directeur Qualité  
Quality Director

2439

FAE-112212

50599

15087

**MILL TEST**

BILL TO	5795	CERT CODE:	9	DIE NUMBER	S	4660	DATE OF SHIPMENT	Oct/19/2017	MANIFEST NO.
SHIP TO	LES METAUX SPECIALISES SAMUEL	CUSTOMER PO	C74902	ALLOY	6061	TEMPER	T6511	SALESMAN	HOUSE ACCOUNTS
SO DESCRIPTION	2.5 x 1.5 FB	CUSTOMER PART NUMBER	V836661	PART DESCRIPTION	2.5 x 1.5 FB	CERTIFICATION ASTM B221-14 - AMS QQA 200/8			

210182 -- 9

379633

MADE IN CANADA

**Mechanical Properties**

Lot	Alloy	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation	Hardness Rockwell E	Conductivity
A.11	6061	Oct/13/2017	42.30	38.40	12.80	89.0,89.2,89.5	

**Chemical Composition**

Cast Number	Lot	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ga	V	B	Zr	Bi	Pb	Sn	Sr	Co	Al	Other
386350	A.11	6061	0.6	0.15	0.21	0.04	0.87	0.07	0	0.01	0.02	0	0	0	0	0	0	0	0	0	0	0

We certify that the following extrusions have been quality inspected/tested and conforms to required dimensional and temper specifications.

*T. Mohabir*

Tulsiram Mohabir  
Quality Control Manager

89113

Dart

162721

# KAISER ALUMINUM

FABRICATED PRODUCTS

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
5205 KAISER DRIVE  
KALAMAZOO, MI 49048

*Best in Class*

## CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CUSTOMER PO NUMBER: 5400396921-3		CUSTOMER PART NUMBER: ALSQ00023		PRODUCT DESCRIPTION: 2.250 SC SQ BAR	
KAISER ORDER NUMBER: 6051775	LINE ITEM: 003	SHIP DATE: 04/12/2018	KAISER LOT NUMBER: Z00779020	ALLOY: 6061	TEMPER: T6511
WEIGHT SHIPPED: 1000.000 LB	QUANTITY: 14.000 PCS	B/L NUMBER: 622454	DIAM/DAF/THKNS: 	WIDTH: 	LENGTH: 12.000 FT
SHIP TO:			SOLD TO:		

### Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
Z00779020	0001	0001	48.0	44.3	13.0	RE 94	N/A	N/A
Z00779020	0001	0002	45.2	41.4	10.2	RE 94	N/A	N/A
Z00779020	0001	0003	47.1	43.4	14.6	RE 93	N/A	N/A
Z00779020	0002	0001	47.7	43.9	10.1	RE 93	N/A	N/A
Z00779020	0002	0002	46.8	43.2	10.2	RE 93	N/A	N/A
Z00779020	0002	0003	48.4	44.8	13.2	RE 94	N/A	N/A
Z00779020	0002	0004	47.2	43.6	13.4	RE 93	N/A	N/A

### Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
108298	.77	.27	.29	.10	.95	.09	.02	.02	.00	.00	.00	.01	.04

### Applicable Requirements:

ASTM-B221-14 STENCILED ASME-SB221 2009 SECT II AMS-QQ-A-200/8A UNS#A96061 (T6511 also conforms to T6-not applicable to other tempers)

### Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA

MERCURY IS NOT A NORMAL BACKGROUND ELEMENT IN ALUMINUM ALLOYS. NEITHER MERCURY NOR ANY OF ITS COMPOUNDS ARE UTILITZED BY KAISER ALUMINUM IN THE MANUFACTURE OF THIS MATERIAL.

Plant Serial: 00330009

Kaiser Order Number: 6051775

Line Item: 003



**KAISER**  
**ALUMINUM**  
**FABRICATED PRODUCTS**

*Best in Class*

**CERTIFIED TEST REPORT**

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
5205 KAISER DRIVE  
KALAMAZOO, MI 49048

**CERTIFICATION**

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Aimee L. Macnowski, Quality & Technology Manager

*Aimee L. Macnowski*

#4271

FEAL-316486061

P.O. 14245

50266

## ALNAN-MILL TEST CERTIFICATE

ASTM B209-2010, Aluminum Association Standard,

AMS4027 and AMS QQA 260/11

COUNTRY OF MELT AND MANUFACTURE: CHINA

DATE: 10/12/2016

Buyer: METAL EXCHANGE CORPORATION.	Lot No.:	6181503	Product: 工有板	Aluminum Plate
Address: 111 West Port Plaza Suite 360 St. Louis, MO United States, 63146	Certificate No.:	P-161218-6289	Difference:	0.188*48.6*96.5(inch) (179pcs)
	Release No.:	12900029	Alloy/Temper:	6061T6
	Customer Order No.:	ALNAN-XS16-FR617(1071861)	Total Quantity:	7.001MT

Mechanical Properties											
Lot No.	Cast No.	Metal ID	Alloy	Spec. No.	Mechanical Properties						
					Tensile Strength (Ksi)	Yield Strength (Ksi)	Elongation 50mm (%)	Bend	Interc	Exfcor	Hardness (HB)
6181503	-		6061T6		45.7-45.8	41.2-41.3	16.5-17.0	Qualified	-	-	-

Chemical Composition																
weight %	Cast No.	Alloy	SI	Fe	Cu	Mn	Mg	Cr	NI	Zn	TI	Ga	V	Remark	Each	Total
Min.	-	-	0.40	-	0.15	-	0.80	0.04	-	-	-	-	-	-	-	-
Max.	-	-	0.80	0.70	0.40	0.15	1.20	0.35	-	0.25	0.15	-	-	-	0.05	0.10
6181503	-	6061/T6	0.63	0.21	0.26	0.11	1.05	0.23	-	0.04	0.02	-	-	-	≤0.05	≤0.10

We hereby certify that the material described above has been tested and complies with the terms of the order contract.  
The inspection results indicated in the chemical composition have been obtained from cast analysis.

Issue by QA51

Review by QA10

**Abnahmeprüfzeugnis 3.1 (EN 10204)**  
**Inspection certificate - mill certificate**

Nr.: 89055159

03 / 4

Rev.: 0

Seite / page:

1 von / of 2

Datum / date:

2017 06 28

Zertifiziert nach / certified to ISO 9001, ISO/TS 16949, EN/AS 9100, ISO 14001, NADCAP

<b>Auftraggeber / customer:</b> CBS Atlanta 1500 Cherokee Pkwy ACWORTH GA 30102-1603 USA	Bestell Nr. / order no.:	5400342513-R01
	Datum / date:	2017 03 02
	Auftragsbest. Nr. / order confirm no.:	130077
	Datum / date:	2017 04 13
<b>Warenempfänger / consignee:</b> CBS Atlanta 1500 Cherokee Pkwy ACWORTH GA 30102-1603 USA	Lieferschein Nr. / delivery note:	89055159
	Datum / date:	2017 07 31

<b>Produkt / product</b> Form / form: Sheet Werkstoff / material: 6061 Zustand / temper: T6 Dim / dim.: [inch]: 0,080x48,00x144,00 Kundenartikel Nr. / cust. article no.: ALFLR01650	<b>Bedingungen / terms</b> Technische Lieferbedingungen / techn. spec.: AMS-QQ-A-250/11, 08.1997 ASTM B 209 - 14 AMS 4027N, 07.2008 ASME SB-209, 2011a  Sondervorschrift / special terms:
---	--

AB-Pos. ord.-item.	BNr/Los Lot/No.	Teillos Part	Guss Nr. cast no.	Werkstoff material	Kollo packno.	Gewicht netto weight net	Stk. pcs.
05	34097/01	00	01/0083429/7	6061	1300770006	4056,437 lbs	75

Chemische Zusammensetzung ([%] Gewichtsanteile) / Chemical composition ([%] weight proportion (OES))											
Guss Nr. / cast no.	material	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others Each	Others Total
01/0083429/7	6061	0,40	-	0,15	-	0,80	0,04	-	-	-	-
	spec. min.	0,80	0,70	0,40	0,15	1,20	0,35	0,25	0,15	0,05	0,15
	spec. max.	0,64	0,46	0,23	0,11	0,87	0,17	0,08	0,04	0,02	0,03
	actual										

Zugprüfung LT / tensile test LT							
BNr/Los	Zustand	Richtung	Tests	UTS	YS	A2"	
Lot/No.	temper	direction		[ksi]	[ksi]	[%]	
			spec.min.	42,0	35,0	10	
			spec.max.	-	-	-	
34097/01	T6	LT	2	from	47,4	40,0	15
34097/01	T6	LT		to	47,4	40,0	16

<b>Sonstige Prüfungen / other tests</b> Biegeversuch: OK. / Transverse bend test: OK. Maßkontrolle: OK. / Dimensional Check: OK. Oberfläche: OK. / Surface inspection: OK.
---



**Abnahmeprüfzeugnis 3.1 (EN 10204)**  
**Inspection certificate - mill certificate**

**Nr.: 89055159**

**03 / 4**

**Rev.: 0**

Seite / page:

2 von / of 2

Datum / date:

2017 06 28

Zertifiziert nach / certified to ISO 9001, ISO/TS 16949, EN/AS 9100, ISO 14001, NADCAP

**Bemerkungen / notes**

Gegossen und gefertigt in Österreich / Country of melt and manufactured in Austria

Es wird bestätigt, dass die Lieferung geprüft wurde und den Vereinbarungen bei der Bestellung entspricht.  
We hereby certify that the material described above has been tested and complies with the terms of the order contract.

**Werksachverständiger / factory specialist**

**E-Mail / e-mail**

Josef Klampfer

josef.klampfer@amag.at

Herstellerland: Österreich / goods origin: The goods are of Austrian origin.  
Maschinell erstellt - Gültig ohne Unterschrift / Automated - valid without being signed.

# CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

# 9268

PO.11395

RSS-34114

49170

Page 01 of 02

Certification Date  
27-NOV-2017

CUSTOMER ORDER NUMBER  
NUMÉRO DE COMMANDE DU CLIENT

Invoice Number  
T373050

AC00011395  
PART NUMBER/NUMÉRO DE PIÈCE  
510517

SOLD TO: ACIER OUELLETTE INC. SHIP TO: ACIER OUELLETTE INC.  
VENDU À: DIVISION SALABERRY DE VALLEYFIELD DIVISION SALABERRY DE VALLEYFIELD  
935, BOUL. DU HAVRE 935, BOUL. DU HAVRE  
SALABERRY-DE- VALLEYFIELD QC J6S 5L1 SALABERRY-DE- VALLEYFIE QC J6S

Description: 17-4 SOL ANN CF BAR ASTM A564  
3/4 RD X 12" R/L Line Total: 185 LB  
HEAT: 9SG0264-G5011 ITEM: 510517

Specifications:  
AMS 5643 U  
ASTM A388/A388M 16  
ISO 15156-1 09\*  
EN 10204 3.1  
ASTM E340  
ASTM A564 T630 13  
AMS 2303 F  
\*EXCEPT FOR H2S  
ASTM F899 12B  
AMS 2315  
ASME SA564 T630 13  
NACE MR0175 09  
CORROSION TEST)  
API 6A APPENDIX M  
ASTM E112

## CHEMICAL ANALYSIS

C	SI	MN	P	S	NI	CR	MO
0.01	0.34	0.62	0.017	0.003	4.69	15.35	0.23
CU	NBTA	NB	TA				
3.30	0.27	0.26	0.005				

RCPT: R201370

COUNTRY OF ORIGIN : TAIWAN

## MECHANICAL PROPERTIES

DESCRIPTION	YLD STR	ULT TEN	%ELONG	%RED IN AREA	HARDNESS BHN
COND A					321
DESCRIPTION	YLD STR	ULT TEN	%ELONG	%RED	HARDNESS
	KSI	KSI	IN 02 IN	IN AREA	BHN
DEV: H900 L	182.0	201.0	17.0	53.0	428

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport n'a pas été en contact avec le mercure pendant sa possession.

JOANNE DESPRES

MANAGER QUALITY ASSURANCE  
GÉRANT DE L'ASSURANCE QUALITÉ

# CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 02 of 02

Certification Date  
27-NOV-2017

CUSTOMER ORDER NUMBER  
NUMÉRO DE COMMANDE DU CLIENT

AC00011395

Invoice Number  
T373050

PART NUMBER/NUMÉRO DE PIÈCE  
510517

SOLD TO:	ACIER OUELLETTE INC.	SHIP TO:	ACIER OUELLETTE INC.
VENDU À:	DIVISION SALABERRY DE VALLEYFIELD	EXPÉDIE À:	DIVISION SALABERRY DE VALLEYFIELD
	935, BOUL. DU HAVRE		935, BOUL. DU HAVRE
	SALABERRY-DE- VALLEYFIELD QC J6S 5L1		SALABERRY-DE- VALLEYFIE QC J6S

Description: 17-4 SOL ANN CF BAR  
3/4 RD X 12' R/L

ASTM A564  
Line Total: 185 LB

HEAT: 9SG0264-G5011 ITEM: 510517

GRAIN SIZE :8 -

MATERIAL IS FREE FROM MERCURY CONTAMINATION  
NO WELD REPAIR PERFORMED ON MATERIAL  
ULTRASONIC: YES  
THERMAL TREATMENT: OK  
SOLUTION TREATMENT: 1900 +/-25 DEG F FOR 30 MIN/INCH  
(MINIMUM OF 1/2 HOUR), RAPIDLY COOLED TO BELOW 90  
DEG F  
MACRO: OK  
MICRO: OK  
AMS NO :2303  
SEVERITY :0.0  
FREQUENCY:0.0

## COMMENTS

red. ratio 279.6:1  
17-4 is the same with aisi 630  
free from residual radioactivity

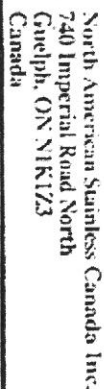
The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.  
The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession./Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

*Joanne Després*

MANAGER QUALITY ASSURANCE  
GÉRANT DE L'ASSURANCE QUALITÉ





## METALLURGICAL TEST REPORT

6870 Highway 42 East  
Ghent, KY 41045-9615  
(502) 347-6000

49830

Certificate: 365074 1 Mail To:

**Ship To:**

Date: 12/20/2017 Page: 1

00706E 007

Scene1: 303

**Finish: CD**

Corrosion:

YOUR ORDER: VIM643834

NAS Order: PN 0087675 02

Heat Treat Code: 44, 568

Red Ratio: 69.4 : 1

PRODUCT DESCRIPTION:

Round Bar, Annealed, Cold Drawn  
UNS 30300, ASTM A582/12 EN 10204 3.1, ASTM A486/16  
AMS 5640V TYPE 1, QCS-1648 CONDITION A  
SOLUTION ANNEAL TEMP 1900F MIN, ASTM F899/12b

## REMARKS:

COMPLIES W/REQUIREMENTS OF DPM 252.225-7009 EU DIRECTIVE  
2011/65/EU.ROHS. EAF4AD0C. NO WELD REPAIR. MELTED AND MFG  
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Product Id	Skid #	Diameter	Size	Weight	-----Length-----	Mark	Pieces	Commodity	Codo
BJ1787 9		1.0000		1,298	144.00	56	1		

## CHEMICAL ANALYSIS

CM(Country or Mch)

US(United

ZA(South Africa) JP(Japan)

CHEMICAL ANALYSIS FOR ARSINIC A/24/2000

Lab Accreditation Bureau, ISO/IEC 17025, Certificate# L23253

ANALYST	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
620M	US	.026	.09	17.11	.31	1.92	.268	.036	8.53	.031
	S %	ST %								
	.3350	.37								

## MECHANICAL PROPERTIES

Product Id	1 d o i c k	HB No.	.2YS KSI	TTS KSI	RA %	Elong % 4D
BJ1787 9	R L	221.0	78.77	102.63	37.91	22.61

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical  
Dept. Mgr.

CHRIS LARKIN

12/20/2017

## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061H65.080  
 DATE: MAY 19 2018

PO / BATCH NO.: 039877/5072722

MATERIAL CERT REC'D: yes  
 QUANTITY RECEIVED: 192 P12  
 QUANTITY INSPECTED: 192 P12  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: .080  
 THICKNESS RECEIVED: .080  
 SHEET SIZE ORDERED: 48" X 12  
 SHEET SIZE RECEIVED: 48" X 12

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
CORROSION	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	<u>Astm B209</u>
CORRECT THICKNESS	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
PHOTO REQUIRED	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	<u>Heat # 01/0083429/7 - 63265/01</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS 11</u> DATE: <u>9-89 MAY 19 2018</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

△ PURCHASE MATERIAL: 6061-T6/T62/T651 ALUMINUM SHEET OR PLATE

SPECIFICATION: QQ-A-250/11 OR AMS-QQ-A-250/11  
OR AMS-4025QR 4027  
OR ASTM-B209

△ PART NUMBER: M6061T6S XXX X W.WWW  
THK WIDTH

WHERE "XXX" = THICKNESS (IN INCHES)  
AND "W.WWW" = WIDTH (IN INCHES, OPTIONAL, FOR SPECIFYING CUT PLATE)

EG. 0.063" THICK SHEET = M6061T6S.063  
EG. 3.5" WIDE BY 0.500" THICK PLATE = M6061T6S.500X3.500

△ PREFERRED SIZE: XXX BY 4FT BY 8FT FOR SHEET

C	ADD PLATE AND T651 SPEC	ML	17.12.13
B	REFORMAT DWG. ADD B209 SPEC (ZN D8-1). REF PAR 08-020A	CP	09.07.13
A	NEW ISSUE	RF	01.06.08
REV.	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN	ML		
CHECKED	NO		
MFG. APPR.	JFS		
APPROVED	HS		
DE APPR.	CP		
DATE	17.12.13		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M6061T6S			
REV. C			
SHEET 1 OF 1			
TITLE 6061-T6 SHEET/PLATE SPEC			
SCALE NTS			
COPYRIGHT © 2001 BY DART AEROSPACE LTD			
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN PERMISSION FROM DART AEROSPACE LTD			

RELEASED

2018 MAR 13 4  
REV 18-656

APPROVED



# Order - Factory

Copy

CO00089113

Product Description	Weight	Qty	UM	PCS NB		Internal Use Only		
				CMD	EXP	B/O	IN	I S C OUT
<b>8</b> ALU SHEET .081 (12G) 6061-T6 (4 X 12) FEAL-0814126061 <b>3195</b> 4 X 4' X 12' LINE 8 HEAT: 01/008342917 TRANSIT ST-JEROME LE 14/05	219.07	192.00	PI2_\$CLB	4.00				
<b>10</b> PALETTE PALETTE <b>7573</b>		1.00	UN_\$UN	1.00				
<b>11</b> ROUND SS 3/4 17-4PH NS RSS-34174 <b>9268</b> 2 X 12' R/L LINE 9 HEAT: 9SG0264-65011	36.05	24.00	PI_\$CLB	2.00				
<b>12</b> SQUARE SS 1 SS303 NS CSS-1303 <b>9512</b> 2 X 12' R/L LINE 10 AC16273-SM-17/05	81.60	24.00	PI_\$CLB	2.00				
<b>13</b> ROUND SS 1 303 (R) RSS-1303 <b>8519</b> 1 X 12' R/L LINE 11 HEAT: 620M	32.04	12.00	PI_\$CLB	1.00				
<b>14</b> PLATE 4140 HEAT TREAT 1 1/4 NS P4140-114H <b>8506</b> 1 X 2" X 72" LINE 12 AC16274-FU-17/05	51.05	1.00	PI2_\$CLB	1.00				
SURCHARGE ENERGETIQUE FRAIS_ENERGETIQUE	\$	0.00		0.00				
<b>Conditions :</b> All sold and delivered materials remain the property of "Acer Ouellette Inc" until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acer Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acer Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.				Total Weight (LBS) : 1 074.80 NIR : R-109516-6				
Prepared By :	Delivered By :	Time	Customer's Signature		Y	M	D	
Verified By :								
				Total (\$CAD)		Deposit		
						Balance		
						5 124.97		
						0.00		
						5 124.97		

## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M4140H-R2.750  
 DATE: MAY 19 2018

PO / BATCH NO: 039877/5072715

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 11'  
 QUANTITY INSPECTED: 11'  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 2.750  
 THICKNESS RECEIVED: 2.750  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORROSION	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	<u>A193</u>
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
PHOTO REQUIRED	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	<u>Heat # L7356</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS</u>		SIGNED OFF BY: _____	
DATE: <u>9-89 MAY 19 2018</u>		DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

**DART**

DESIGN #	DRAWN BY #	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. M4140H-R	REV. A SHEET 1 OF 1
DATE 05.02.21		TITLE 4140 ROUND BAR	SCALE 1:1
A	05.02.21	NEW ISSUE	

PURCHASE MATERIAL: AISI 4140H ROUND BAR

PER AISI 4140 OR ASTM A304-02 / -A-434-BC /

A193-03 - GRADE-B7 / -A29-03 / -A322-91 OR

UNS # - G41400

MINIMUM ULTIMATE TENSILE STRENGTH = 100 ksi

MINIMUM YIELD TENSILE STRENGTH = 66 ksi

PART NUMBER: M4140H-R | D.DDD | WHERE D.DDD = DIAMETER IN INCHES  
DIA.

EG.  $\frac{7}{8}$ " ROUND BAR = M4140H-R0.875

RELEASED  
05.03.25

Copyright © 2005 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061+6B0.750X05.000 PO / BATCH NO.: 039827/5072716  
 DATE: MAY 19 2018

MATERIAL CERT REC'D: YES  
 QUANTITY RECEIVED: 12'  
 QUANTITY INSPECTED: 12'  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.750  
 THICKNESS RECEIVED: 0.750  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	Astm B221
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	Heat # 16030232B
CORRECT MATERIAL IDENTIFICATION	(Y) N	
CORRECT M# ON THE MATERIAL	(Y) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK.  
 RECORD RESULTS BELOW

	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS 11</u> DATE: <u>9-89 MAY 19 2018</u>	SIGNED OFF BY: _____ DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR

SPECIFICATION: QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221

PART NUMBER: M6061T6B | T.TTT | X | WWW.WWW | THICK | WIDTH

WHERE "T.TTT" = THICKNESS IN INCHES  
"WWW.WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

RELEASED  
R 2009-09-03

B	REMOVE QQ-A-250/11 OPTION, REFORMAT NOTES, ADD ASTM B211/B221 (ZND7-1)	CP	09.07.13
A	NEW ISSUE	DS	01.06.08
REV	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE LTD	
DRAWN	99	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AS	DRAWING NO.	REV. B
MFG. APPR.	AS	M6061T6B	SHEET 1 OF 1
APPROVED	MP	TITLE	SCALE
DE APPR.	MP	6061-T6 BAR	NTS
DATE	09.07.13	COPYRIGHT © 2001 BY DART AEROSPACE LTD	

THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE LTD. IT IS TO BE USED ONLY FOR THE PURPOSES FOR WHICH IT WAS ISSUED. IT IS NOT TO BE LOANED, REPRODUCED, COPIED, OR IN ANY MANNER DISSEMINATED WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.

## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M606176B 0.500 X 0.500 PO / BATCH NO: 039877/5072717  
 DATE: MAY 19 2018

MATERIAL CERT REC'D: yes  
 QUANTITY RECEIVED: 12'  
 QUANTITY INSPECTED: 12'  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.500  
 THICKNESS RECEIVED: 0.500  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORROSION	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	<u>Astm B221</u>
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
PHOTO REQUIRED	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	<u>Next # 02J17116B / 02J17117B</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS 11</u> DATE: <u>9-89 MAY 19 2018</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR

SPECIFICATION: QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221

PART NUMBER: M6061T6B | T.TTT | X | WWW | WWW | THICK | WIDTH

WHERE "T.TTT" = THICKNESS IN INCHES  
"WWW.WWWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

RELEASED  
R 2009-09-03

B	REMOVE QQ-A-250/11 OPTION, REFORMAT NOTES, ADD ASTM B211/B221 (Zn D7-1)	CP	09.07.13
A	NEW ISSUE	DS	01.06.08
REV	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN	DS		
CHECKED	DS		
MFG. APPR.	DS		
APPROVED	DS		
DE APPR.	DS		
DATE	09.07.13		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M6061T6B		REV. B	
TITLE 6061-T6 BAR		SHEET 1 OF 1	
SCALE NTS		NTS	
COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DRAWING IS THE PROPERTY OF DART AEROSPACE LTD AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.			

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061 T6 B0.750x01.500

PO / BATCH NO.: 039877/5072718

DATE: MAY 19 2018

MATERIAL CERT REC'D: YES  
 QUANTITY RECEIVED: 40'  
 QUANTITY INSPECTED: 40'  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.750  
 THICKNESS RECEIVED: 0.750  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	(Y) (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	Austin B221
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	(Y) (N)	
CORRECT REF # TO LINK CERT	(Y) N	Heat # 68549
CORRECT MATERIAL IDENTIFICATION	(Y) N	
CORRECT M# ON THE MATERIAL	(Y) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

*testers located in the Quality Office*

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS 11</u>	SIGNED OFF BY: _____
DATE: <u>9-09 MAY 19 2018</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR

## SPECIFICATION:

QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/415/416)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221

## PART NUMBER:

M6061T6B

T TTT X WW WWW/  
THICK WIDTH

WHERE "T TTT" = THICKNESS IN INCHES  
"WW WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

B	REMOVE QQ-A-250/11 OPTION, REFORMAT NOTES, ADD ASTM B211/B221 (ZND7-1)	CP	09.07.13
A	NEW ISSUE	DS	01.06.08
DESIGN	DS	DESCRIPTION	
DRAWN	DS	DART AEROSPACE LTD	
CHECKED	DS	HAWKESBURY, ONTARIO, CANADA	
MFG. APPR.	DS	DRAWING NO. M6061T6B	
APPROVED	DS	TITLE 6061-T6 BAR	
DE APPR.	DS	SHEET 1 OF 1	
DATE	09.07.13	SCALE NTS	

RELEASED  
2009-09-03  
MAD

COPYRIGHT © 2009 BY DART AEROSPACE LTD.  
THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE LTD. AND IS NOT TO BE USED FOR ANY PURPOSE OR REPRODUCED IN ANY FORM WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.

## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061 T6 B1.500x02.500

PO / BATCH NO.: 039877/5072719

DATE: MAY 19 2018

MATERIAL CERT REC'D: yes  
 QUANTITY RECEIVED: 24'  
 QUANTITY INSPECTED: 24'  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.500  
 THICKNESS RECEIVED: 1.500  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) (N)	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) (N)	
CORRECT MATERIAL PER M-DRAWING	(Y) (N)	Astm B221
CORRECT THICKNESS	(Y) (N)	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) (N)	Heat #3B6350
CORRECT MATERIAL IDENTIFICATION	(Y) (N)	
CORRECT M# ON THE MATERIAL	(Y) (N)	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

### QC 18 INSPECTION

ENGINEERING SIGNOFF (if required)

INSPECTED BY: DAS  
11

SIGNED OFF BY: \_\_\_\_\_

DATE: 9-89 MAY 19 2018

DATE: \_\_\_\_\_

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR

SPECIFICATION: QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221

PART NUMBER: M6061T6B | T.TT | X | WWW.WWW | THICK | WIDTH

WHERE "T.TT" = THICKNESS IN INCHES  
"WWW.WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

RELEASED  
R 2009-09-03

B	REMOVE QQ-A-250/11 OPTION, REFORMAT NOTES, ADD ASTM B211/B221 (ZN D7-1)	CP	09.07.13
A	NEW ISSUE	DS	01.06.08
REV	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE LTD	
DRAWN	DS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AS	DRAWING NO.	
MFG. APPR.	AS	M6061T6B	
APPROVED	AS	TITLE	
DE APPR.	AS	6061-T6 BAR	
DATE	09.07.13	SCALE	
		NTS	
COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSES OTHER THAN THAT FOR WHICH IT WAS ORIGINALLY INTENDED. DART AEROSPACE LTD, HAWKESBURY, ONTARIO, CANADA			

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061 H6 B2.250x2.250

PO / BATCH NO.: 039877/5072720

DATE: MAY 19 2018

MATERIAL CERT REC'D: YES  
 QUANTITY RECEIVED: 12  
 QUANTITY INSPECTED: 12  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 2.250  
 THICKNESS RECEIVED: 2.250  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT FINISH	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORROSION	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT GRAIN DIRECTION	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT MATERIAL PER M-DRAWING	Y <input checked="" type="radio"/> N <input type="radio"/>	<u>As per B221</u>
CORRECT THICKNESS	Y <input checked="" type="radio"/> N <input type="radio"/>	
PHOTO REQUIRED	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT REF # TO LINK CERT	Y <input checked="" type="radio"/> N <input type="radio"/>	<u>Heat # 200779020</u>
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT M# ON THE MATERIAL	Y <input checked="" type="radio"/> N <input type="radio"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input type="radio"/> N <input checked="" type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input type="radio"/> N <input checked="" type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK.  
 RECORD RESULTS BELOW

	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS</u>	SIGNED OFF BY: _____		
DATE: <u>9-89 MAY 19 2018</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

**SPECIFICATION CONTROL DRAWING**

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR

SPECIFICATION: QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/415/416)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221

PART NUMBER:

M6061T6B T.TTT X WWW.WWW/

THICK WIDTH

WHERE "T.TTT" = THICKNESS IN INCHES  
"WWW.WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

**RELEASED**  
2009-03-03  
MAD

B	REMOVE QQ-A-250/11 OPTION, REFORMAT NOTES, ADD ASTM B211/B221 (2N D7-1)	CP	09.07.13
A	NEW ISSUE	DS	01.06.08
REV	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN	ASS		
CHECKED	ASS		
MFG. APPR.	MP		
APPROVED	MP		
DE APPR.			
DATE	09.07.13		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M6061T6B			
REV. B			
SHEET 1 OF 1			
SCALE NTS			
TITLE 6061-T6 BAR			
COPYRIGHT © 2001 BY DART AEROSPACE LTD			
THIS DOCUMENT IS UNCLASSIFIED AND IS NOT TO BE RELEASED TO THE PUBLIC WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD			

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: Nickel 6165-188  
 DATE: MAY 19 2018

PO / BATCH NO.: 039872/5072721

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 32 P12  
 QUANTITY INSPECTED: 32 P12  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: .188  
 THICKNESS RECEIVED: .188  
 SHEET SIZE ORDERED: 4x8  
 SHEET SIZE RECEIVED: 4x8

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	
CORRECT FINISH	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	
CORROSION	Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	Astm B209
CORRECT THICKNESS	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	
PHOTO REQUIRED	Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	Heat # 6161503
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

<b>QC 18 INSPECTION</b>		<b>ENGINEERING SIGNOFF (if required)</b>	
INSPECTED BY: <u>DAS 11</u>	SIGNED OFF BY: _____		
DATE: <u>9-89 MAY 19 2018</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

△ PURCHASE MATERIAL: 6061-T6/T62/T651 ALUMINUM SHEET OR PLATE

SPECIFICATION: QQ-A-250/11 OR AMS-QQ-A-250/11  
OR AMS 4026 OR 4027  
OR ASTM B209

△ PART NUMBER: M6061T6S XXXI X W.WWW  
THK WIDTH

WHERE "XXX" = THICKNESS (IN INCHES)  
AND "W.WWW" = WIDTH (IN INCHES, OPTIONAL, FOR SPECIFYING CUT PLATE)

EG. 0.063" THICK SHEET = M6061T6S.063

EG. 3.5" WIDE BY 0.500" THICK PLATE = M6061T6S.500X3.500

△ PREFERRED SIZE: .XXX BY 4FT BY 8FT FOR SHEET

RELEASED

2018 MAR 13 4P  
EJ 18-696

C	ADD PLATE AND T651 SPEC	ML	17.12.13
B	REFORMAT DWG. ADD B209 SPEC (ZN D8-1), REF PAR 08-020A	CP	09.07.13
A	NEW ISSUE	RF	01.08.08
REV.	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN	ML		
CHECKED	NO		
MFG. APPR.	JFS		
APPROVED	HS		
DE APPR.	CP		
DATE	17.12.13		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
REV. C			
DRAWING NO. M6061T6S			
SHEET 1 OF 1			
TITLE 6061-T6 SHEET/PLATE SPEC NTS			
COPYRIGHT © 2001 BY DART AEROSPACE LTD.			
THIS DOCUMENT IS UNCLASSIFIED AND IS SUPPLIED TO YOU BY DART AEROSPACE LTD. IT IS NOT TO BE USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS ORIGINALLY INTENDED.			

## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M17-4-R0.730  
 DATE: MAY 19 2018

PO / BATCH NO.: 039877/5072723

MATERIAL CERT REC'D: yes  
 QUANTITY RECEIVED: 24'  
 QUANTITY INSPECTED: 24'  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.750  
 THICKNESS RECEIVED: 0.750  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y	N	
CORROSION	Y	<input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y	N	Am55643
CORRECT THICKNESS	<input checked="" type="radio"/> Y	N	
PHOTO REQUIRED	Y	<input checked="" type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y	N	Heat # 9560264-65011
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

*testers located in the Quality Office*

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS 11</u> DATE: <u>9-8 MAY 19 2018</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 17-4 PH / S17400 / TYPE 630 SS ROUND BAR  
GRAIN MUST BE ALONG LENGTH OF BAR  
MINIMUM YIELD STRENGTH PER TABLE  
MINIMUM ULTIMATE STRENGTH PER TABLE

SPECIFICATION: AMS 5643 OR ASTM A564

PART NUMBER: M17-4- H1150- R | X-XXX | WHERE: H1150 SPECIFIES THE MATERIAL CONDITION (PER TABLE BELOW)  
COND O.D. X.XXX = DIAMETER (IN INCHES)

MATERIAL CONDITION TABLE:

CODE	CONDITION	MIN YIELD TENSILE STRENGTH (KSI)	MIN ULTIMATE TENSILE STRENGTH (KSI)
(OMITTED)	NONE SPECIFIED (CONDITION A NOT ACCEPTABLE)	100	150
H900	H900	170	190
H925	H925	155	170
H1025	H1025	145	155
H1075	H1075	125	145
H1100	H1100	115	140
H1150	H1150	105	135
CONDA	CONDITION A (SOLUTION TREATED)		

NOTES: MATERIAL IN H900 AND H925 CONDITION NOT RECOMMENDED FOR TENSION OR SHEAR APPLICATIONS IN COLD WEATHER CONDITIONS  
MATERIAL IN H900 AND H925 CONDITION NOT RECOMMENDED FOR APPLICATIONS WHERE STRESS CORROSION CRACKING IS POSSIBLE  
CONDITION A NOT TO BE USED IN DESIGN FOR FINAL PRODUCT AND SHOULD ALWAYS BE HEAT TREATED

EXAMPLES:

PART NUMBER  
4.000" DIAMETER BAR MIN UTS = 150 KSI, MIN YTS = 100 KSI  
2.500" DIAMETER BAR H900 CONDITION  
3.250" DIAMETER BAR H1025 CONDITION  
0.750" DIAMETER BAR A CONDITION

RELEASED  
2017-10-31  
E17-728

APPROVED

C	ADDED MATERIAL CONDITION (CIR17-107)	NO	17.09.14
B	REFORMAT DWG. S17400 TYPE 630 ADDED TO PURCHASE MATERIAL (ZIN DB-1), ADD A564 SPEC (CB-1), REF PAR 08-020A	VS	10.05.20
A	NEW ISSUE	CP	05.03.16
REV.	DESCRIPTION	BY	DATE
DESIGN	NO		
DRAWN	NO		
CHECKED	CP		
MFG. APPR.	RA		
APPROVED	WM		
DE APPR.	CP		
DATE	17.09.14		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M17-4-R			
SHEET 1 OF 1			
TITLE 17-4 SS ROUND BAR			
SCALE NTS			
COPYRIGHT © 2005 BY DART AEROSPACE LTD			
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT THE WRITTEN PERMISSION FROM DART AEROSPACE LTD			



# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M303R1.000  
 DATE: MAY 19 2018

PO / BATCH NO.: 039 877/5072724

MATERIAL CERT REC'D: YES  
 QUANTITY RECEIVED: 121  
 QUANTITY INSPECTED: 121  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.000  
 THICKNESS RECEIVED: 1.000  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/>	
CORRECT FINISH	Y <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/>	
CORROSION	Y <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	Y <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/>	
CORRECT MATERIAL PER M-DRAWING	Y <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/>	As per A582
CORRECT THICKNESS	Y <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/>	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	Y <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/>	Heat # 62017
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/>	
CORRECT M# ON THE MATERIAL	Y <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS 11</u>	SIGNED OFF BY: _____
DATE: <u>MAY 19 2018</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 303 SS ROUND BAR  
(NOTE: AISI 304/316 NOT ACCEPTABLE)

SPECIFICATION:  
PART NUMBER:

ASTM A582  
M303R0 DDD  
DIA.

WHERE "D.DDD" = DIAMETER IN INCHES  
EG. 0.75" ROUND BAR = M303R0.750

RELEASED  
R 2010-02-02  
JMD

B	REFORMAT DWG. ADD SPECS (2N DB-1).	CP	10.01.05
A	NEW ISSUE	DS	01.12.20
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.01.05		

**DART AEROSPACE LTD**  
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. M303R  
TITLE 303 ROUND BAR

REV. B  
SHEET 1 OF 1  
SCALE NTS

COPYRIGHT © 2001 BY DART AEROSPACE LTD.  
ALL RIGHTS RESERVED. NO PART OF THIS PUBLICATION MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.